

CLAIMS

1. An intrinsically safe operating system, comprising:
 - 5 a communication device having communication device type certification parameters stored therein;
 - a peripheral device that attaches to the communication device, the peripheral device having peripheral device type certification parameters stored therein; and
 - the communication device restricting the operation of the peripheral device
- 10 when the communication device type certification parameters and peripheral device type certification parameters are incompatible.

2. A method of providing an intrinsically safe communication system,
comprising the steps of:

storing communication device type certification parameters within a
communication device;

5 storing peripheral type certification parameters within a peripheral device;
coupling the peripheral device to the communication device; and

determining whether the peripheral device is intrinsically compatible with the
communication device based on the communication device type certification
parameters and the peripheral type certification parameters.

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3. The method of claim 2, wherein the communication device is a handheld
communication device.

4. The method of claim 2, wherein the peripheral device comprises an accessory.

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5. The method of claim 2, wherein the peripheral device comprises a battery.

6. A method of ensuring intrinsically safe operation of a radio and a peripheral device, comprising:

storing radio type certification parameters within the radio;

storing peripheral device type certification parameters within the peripheral

5 device;

comparing the radio type certification parameters and peripheral type certification parameters;

determining intrinsically safe compatibility based on the step of comparing;

and

10 indicating intrinsically safe incompatibility.

7. The method of claim 6, further comprising restricting the operation of the radio in response to the step of comparing.

15 8. The method of claim 6, further comprising restricting the operation of the peripheral in response to the step of comparing.

9. The method of claim 6, wherein indicating comprises sending a visual alert to a user.

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10. The method of claim 6, wherein indicating comprises sending an audible alert to the user.

11. The method of claim 6, wherein indicating comprises sending a physical alert to the user.

12. An intrinsically safe operating system, comprising:

a communication device having communication device type certification parameters stored therein;

5 a plurality of peripheral devices that attach to the communication device, the plurality of peripheral devices each having peripheral device type certification parameters stored therein; and

the communication device restricting the plurality of peripheral devices to various predetermined levels of operation in response to the communication device type certification parameters and the peripheral device type certification parameters being mismatched.

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13. The intrinsically safe operating system of claim 12, wherein the plurality of peripheral devices includes a battery and accessories coupled to the communication device.

14. A method of providing an intrinsically safe communication system,
comprising the steps of:

storing communication device type certification parameters within a
communication device;

5 storing peripheral type certification parameters within a plurality of peripheral
devices;

coupling the plurality of peripheral devices to the communication device;
determining whether the plurality of peripheral devices are intrinsically compatible
with the communication device based on the communication device type

10 certification parameters and each of the peripheral type certification parameters;
and

selectively restricting operation of the plurality of peripheral devices based on
intrinsic compatibility.

15 15. The method of claim 14, wherein the plurality of peripheral devices includes a
battery and accessories coupled to the communication device.